#### REMARKS

As noted in the Advisory Action dated December 7, 2005, Applicants amendments to the claims included inadvertent errors which raised new issues. In response, the present slate of amended claims retains the inadvertently deleted term "adding" and claims 9 and 10 and been canceled.

An addition, the Examiner requests that claims 19 and 22 include the phrase "An isolated". Applicants have amended claim 19 to include this language. Applicants have taken this opportunity to make it clearer that the expression vector contains the specified sequence.

Applicants do not believe it is necessary to add "An isolated" in to claim 22, in that the claim specifies a cDNA (i.e. not found in nature).

As discussed in the Advisor Action mailed October 28, 2005, upon further review, the Examiner believes that the Amendments to the specification (drawings) and the Claims are not in accord with 37 CFR 1.173(b)(3). The Examiner required Applicants to re-file the amendments according to 37 CFR 1.173(b)(3). As a courtesy, the Examiner kindly called the undersigned attorney to alert him that the Advisory Action was coming. At that time the Examiner explained that:

For the Drawings: The original Drawings should have been included in the Amendment, with brackets around them to indicate that they were to be deleted and the amended drawings should have been submitted with the corrections incorporated, but in "final" format (i.e.not in a marked up format).

For the Claims: The listing of claims should show how the present slate of claims compares with the claims as they originally issued. Brackets and underlines are to be used. Any claim not in the original patent should be underlined.

Applicants have done attempted to amend the claims as the Examiner requires. In the latest amendment to claims 23-25, "which is shown in" has been replaced with "consisting of". Previously this amendment was proposed by the Examiner as an Examiner's amendment. Given the fact that Applicants were required to re-file their previous amendments, the Examiner requested that the Applicants submit the Examiner's proposed amendment as well.

U.S.S.N. 09/731,632 Case No. 18906IAR Page No. 10

Finally, Applicants note that recent Office Actions have been sent to our outside counsel, Eugene Rzucidlo at Greenberg Traurig. As shown in the Re-issue Declaration of Assignee, the undersigned attorney (and others at Merck & Co., Inc.) are the attorneys of record. Acordingly, the undersigned attorney requests further communication to be sent to him at the address provided below.

Applicants respectfully submit that the application is now in condition for allowance, and passage thereto is earnestly requested. The Examiner is invited to contact the undersigned attorney at the telephone number provided below if such would advance the prosecution of this application.

Respectfully submitted,

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Date: December 13, 2005

## **Amendments to the Drawings:**

The amendments to the drawings are provided in Appendix 1. Three figures (FIG. 1A, FIG. 1B and FIG. 2B) are being amended. The originally issued versions are shown in brackets to indicate that they are being deleted. Thereafter, the Examiner will find the amended versions.

The amendments are as follows:

In the sixth line of FIG. 1A, the number "90", has been moved to appear under the 90<sup>th</sup> amino acid.

At the end of FIG. 1B "SEQ ID NO: 10" has been inserted.

At the end of FIG. 2B "SEQ ID NO: 11" has been inserted.

# **APPENDIX 1**

As shown herein, figures FIG. 1A, FIG. 1B and FIG. 2B are to be deleted. The deleted matter is shown by brackets. A set of amendment (replacement) figures FIG. 1A, FIG. 1B and FIB. 2B, are provided thereafter.



#### FIG. 1A

- Met Leu Ala Arg Ala Leu Leu Leu Cys Ala Val Leu Ala Leu Ser His I 5 10 15
- Thr Ala Asn Pro Cys Cys Ser His Pro Cys Gln Asn Arg Gly Val Cys
  20
  25
  30
- Met Ser Val Gly Phe Asp Gln Tyr Lys Cys Asp Cys Thr Arg Thr Gly
  35 40 45
- Phe Tyr Gly Glu Asn Cys Ser Thr Pro Glu Phe Leu Thr Arg Ile Lys 50 55 60
- Leu Phe Leu Lys Pro Thr Pro Asn Thr Val His Tyr Ile Leu Thr His 65 70 75 80
- Phe Lys Gly Phe Trp Asn Val Val Asn Asn Ile Pro Phe Leu Arg Asn 85 90 95
- Ala Ile Met Ser Tyr Val Leu Thr Ser Arg Ser His Leu Ile Asp Ser 100 105 110
- Pro Pro Thr Tyr Asn Ala Asp Tyr Gly Tyr Lys Ser Trp Glu Ala Phe 115 120 125
- Ser Asn Leu Ser Tyr Tyr Thr Arg Ala Leu Pro Pro Val Pro Asp Asp 130 135 140
- Cys Pro Thr Pro Leu Gly Val Lys Gly Lys Lys Gln Leu Pro Asp Ser 145 150 155 160
- Asn Glu Ile Val Glu Lys Leu Leu Leu Arg Arg Lys Phe Ile Pro Asp 165 170 175
- Pro Gln Gly Ser Asn Met Met Phe Ala Phe Phe Ala Gln His Phe Thr 180 185 190
- His Gln Phe Phe Lys Thr Asp His Lys Arg Gly Pro Ala Phe Thr Asn 195 200 205
- Gly Leu Gly His Gly Val Asp Leu Asn His Ile Tyr Gly Glu Thr Leu 210 215 220
- Ala Arg Gln Arg Lys Leu Arg Leu Phe Lys Asp Gly Lys Met Lys Tyr 225 230 235 240
- Gln lle Ile Asp Gly Glu Met Tyr Pro Pro Thr Val Lys Asp Thr Gln 245 250 255
- Ala Glu Met Ile Tyr Pro Pro Gln Val Pro Glu His Leu Arg Phe Ala 260 265 270
- Val Gly Gln Glu Val Phe Gly Leu Val Pro Gly Leu Met Met Tyr Ala 275 280 285
- Thr Ile Trp Leu Arg Glu His Asn Arg Val Cys Asp Val Leu Lys Gln 290 295 300



### FIG. 1B

- Glu His Pro Glu Trp Gly Asp Glu Gln Leu Phe Gln Thr Ser Arg Leu 305 310 315 320
- Ile Leu Ile Gly Glu Thr Ile Lys Ile Val Ile Glu Asp Tyr Val Gln 325 330 335
- His Leu Ser Gly Tyr His Phe Lys Leu Lys Phe Asp Pro Glu Leu Leu 340 345 350
- Phe Asn Lys Gln Phe Gln Tyr Gln Asn Arg Ile Ala Ala Glu Phe Asn 355 360 365
- Thr Leu Tyr His Trp His Pro Leu Leu Pro Asp Thr Phe Gln Ile His 370 375 380
- Asp Gln Lys Tyr Asn Tyr Gln Gln Phe Ile Tyr Asn Asn Ser Ile Leu 385 390 395 400
- Leu Glu His Gly Ile Thr Gln Phe Val Glu Ser Phe Thr Arg Gln Ile 405 410 415
- Ala Gly Arg Val Ala Gly Gly Arg Asn Val Pro Pro Ala Val Gln Lys 420 425 430
- Val Ser Gln Ala Ser Ile Asp Gln Ser Arg Gln Met Lys Tyr Gln Ser 435 440 445
- Phe Asn Glu Tyr Arg Lys Arg Phe Met Leu Lys Pro Tyr Glu Ser Phe 450 455 460
- Glu Glu Leu Thr Gly Glu Lys Glu Met Ser Ala Glu Leu Glu Ala Leu 465 470 475 480
- Tyr Gly Asp Ile Asp Ala Val Glu Leu Tyr Pro Ala Leu Leu Val Glu 485 490 495
- Lys Pro Arg Pro Asp Ala Ile Phe Gly Glu Thr Met Val Glu Val Gly 500 505 510
- Ala Pro Phe Ser Leu Lys Gly Leu Met Gly Asn Val Ile Cys Ser Pro 515 520 525
- Ala Tyr Trp Lys Pro Ser Thr Phe Gly Gly Glu Val Gly Phe Gln Ile 530 535 540
- Ile Asn Thr Ala Ser Ile Gln Ser Leu Ile Cys Asn Asn Val Lys Gly 545 550 560
- Cys Pro Phe Thr Ser Phe Ser Val Pro Asp Pro Glu Leu Ile Lys Thr 565 570 575
- Val Thr Ile Asn Ala Ser Ser Ser Arg Ser Gly Leu Asp Asp Ile Asn 580 585 590
- Pro Thr Val Leu Leu Lys Glu Arg Ser Thr Glu Leu



# FIG. 2B

CTCAATTCAG TCTCTCATCT GCAATAACGT GAAGGGCTGT CCCTTTACTT CATTCAGTGT	1800
TCCAGATCCA GAGCTCATTA AAACAGTCAC CATCAATGCA AGTTCTTCCC GCTCCGGACT	1860
AGATGATATC AATCCCACAG TACTACTAAA AGAACGGTCG ACTGAACTGT AGAAGTCTA	1920
IGATCATATT TATTTATTTA TATGAACCAT GTCTATTAAT TTAATTATTT AATAATATTT	1980
ATATTAAACT CCTTATGTTA CTTAACATCT TCTGTAACAG AAGTCAGTAC TCCTGTTGCG	2040
GAGAAAGGAG TCATACTTGT GAAGACTTTT ATGTCACTAC TCTAAAGATT TTGCTGTTGC	2100
TGTTAAGTTT GGAAAACAGT TTTTATTCTG TTTTATAAAC CAGAGAGAAA TGAGTTTTGA	2160
CGTCTTTTA CTTGAATTTC AACTTATATT ATAAGGACGA AAGTAAAGAT GTTTGAATAC	2220
TTAAACACTA TCACAAGATG CCAAAATGCT GAAAGTTTTT ACACTGTCGA TGTTTCCAAT	2280
GCATCTTCCA TGATGCATTA GAAGTAACTA ATGTTTGAAA TTTTAAAGTA CTTTTGGGTA	2340
TITTTCTGTC ATCAAACAAA ACAGGTATCA GTGCATTATT AAATGAATAT TTAAATTAGA	2400
CATTACCAGT AATITCATGT CTACTTTITA AAATCAGCAA TGAAACAATA ATTTGAAATT	2460
TCTAAATTCA TAGGGTAGAA TCACCTGTAA AAGCTTGTTT GATTTCTTAA AGTTATTAAA	2520
CTTGTACATA TACCAAAAAG AAGCTGTCTT GGATTTAAAT CTGTAAAATC AGATGAAATT	2580
TTACTACAAT TGCTTGTTAA AATATTTTAT AAGTGATGTT CCTTTTTCAC CAAGAGTATA	2640
AACCTTTTTA GTGTGACTGT TAAAACTTCC TTTTAAATCA AAATGCCAAA TTTATTAAGG	2700
TGGTGGAGCC ACTGCAGTGT TATCTCAAAA TAAGAATATC CTGTTGAGAT ATTCCAGAAT	2760
CTGTTTATAT GGCTGGTAAC ATGTAAAAAC CCCATAACCC CGCCAAAAGG GGTCCTACCC	2820
TTGAACATAA AGCAATAACC AAAGGAGAAA AGCCCAAATT ATTGGTTCCA AATTTAGGGT	2880
TTAAACTTIT TGAAGCAAAC TITTITITAG CCTTGTGCAC TGCAGACCTG GTACTCAGAT	2940
TITGCTATGA GGTTAATGAA GTACCAAGCT GTGCTTGAAT AACGATATGT TTTCTCAGAT	3000
TITCTGTTGT ACAGTTTAAT TTAGCAGTCC ATATCACATT GCAAAAGTAG CAATGACCTC	3060
ATAAAATACC TCTTCAAAAT GCTTAAATTC ATTTCACACA TTAATTTTAT CTCAGTCTTG	3120
AAGCCAATTC AGTAGGTGCA TTGGAATCAA GCCTGGCTAC CTGCATGCTG TTCCTTTTCT	3180
TITCTTCTTT TAGCCATTTT GCTAAGAGAC ACAGTCTTCT CAAACACTTC GTTTCTCCTA	3240
TITTGTTTTA CTAGTTTTAA GATCAGAGTT CACTTTCTTT GGACTCTGCC TATATTTTCT	3300
TACCTGAACT TTTGCAAGTT TTCAGGTAAA CCTCAGCTCA GGACTGCTAT TTAGCTCCTC	3360
ТТААGAAGAT ТААААААА АААААА	3387